

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions:

1. **(Original)** A method comprising:

programming an aggregation table defining a plurality of entries, each entry associated with a column and a row, wherein programming the aggregation table includes

(a) setting an entry to true if

the column of the entry corresponds to a physical link of a link aggregation group (LAG) that uses an aggregation method associated with the row of the entry and which is the physical link to be selected within its LAG according to the aggregation method, or

the column of the entry corresponds to a physical link associated with a LAG that does not use the aggregation method associated with the row of the entry; and

(b) setting all remaining entries to false.

2. **(Original)** The method of claim 1 further comprising

receiving a frame at a switch engine that supports a set of aggregation methods; and

calculating a set of aggregation codes for the frame.

3. **(Original)** The method of claim 2 further comprising selecting a set of two or more rows of the aggregation table, each row being selected according to a corresponding aggregation method, and wherein the set of two or more rows reflects the set of aggregation methods supported by the switch engine.

4. **(Original)** The method of claim 3 further comprising calculating an aggregation mask by performing a Boolean AND operation on the table entries of the two or more selected rows.

5. **(Original)** The method of claim 4 further comprising calculating an output mask by performing a Boolean AND operation on the aggregation mask and a forwarding mask.

6. **(Original)** The method of claim 5 further comprising forwarding the frame to at least one physical link according to the output mask.

7. **(Original)** The method of claim 1 wherein the aggregation table includes at least two sets of rows and at least two sets of columns, each set of rows corresponds to a set of aggregation codes derived exclusively from one of at least two aggregation methods, such that each aggregation method is associated with only one set of rows, each set of columns corresponds to a link aggregation group (LAG), each LAG includes a plurality of physical links, each physical link corresponds to one column, and each LAG uses only one aggregation method.

8. (Canceled)

9. (Canceled)

10. (Canceled)

11. (Canceled)

12. (Canceled)

13. (Canceled)

14. (Canceled)

15. **(Original)** An apparatus comprising a machine accessible medium containing instructions which, when executed by a machine, cause the machine to perform operations comprising:

programming an aggregation table defining a plurality of entries, each entry associated with a column and a row, wherein programming the aggregation table includes

(a) setting an entry to true if

the column of the entry corresponds to a physical link of a link aggregation group (LAG) that uses an aggregation method associated with the row of the entry and which is the physical link to be selected within its LAG according to the aggregation method, or

the column of the entry corresponds to a physical link associated with a LAG that does not use the aggregation method associated with the row of the entry; and

(b) setting all remaining entries to false.

16. **(Original)** The apparatus of claim 15 further comprising receiving a frame at a switch engine that supports a set of aggregation methods; and calculating a set of aggregation codes for the frame.

17. **(Original)** The apparatus of claim 16 comprising selecting a set of two or more rows of the aggregation table, each row being selected according to a corresponding aggregation method, and wherein the set of two or more rows reflects the set of aggregation methods supported by the switch engine.

18. **(Original)** The apparatus of claim 17 further comprising calculating an aggregation mask by performing a Boolean AND operation on the table entries of the two or more selected rows.

19. **(Original)** The apparatus of claim 18 further comprising calculating an output mask by performing a Boolean AND operation on the aggregation mask and a forwarding mask.

20. **(Original)** The apparatus of claim 19 further comprising forwarding the frame to at least one physical link according to the output mask.

21. **(Original)** The apparatus of claim 15 wherein the aggregation table includes at least two sets of rows and at least two sets of columns, each set of

rows corresponds to a set of aggregation codes derived exclusively from one of at least two aggregation methods, such that each aggregation method is associated with only one set of rows, each set of columns corresponds to a link aggregation group (LAG), each LAG includes a plurality of physical links, each physical link corresponds to one column, and each LAG uses only one aggregation method.

22. **(New)** An apparatus, comprising:

an aggregation table defining a plurality of entries; and

a mechanism to program the aggregation table;

wherein a table entry is set to true if:

the column of the entry corresponds to a physical link of a link aggregation group (LAG) that uses an aggregation method associated with the row of the entry and which is the physical link to be selected within its LAG according to the aggregation method, or

the column of the entry corresponds to a physical link associated with a LAG that does not use the aggregation method associated with the row of the entry, and

else the entry is set to false.

23. **(New)** The apparatus of claim 22 further comprising a component to receive a frame at a switch engine that supports a set of aggregation methods; and a component for calculating a set of aggregation codes for the frame.

24. **(New)** The apparatus of claim 23 further comprising a component to select a set of two or more rows of the aggregation table, each row being selected according to a corresponding aggregation method, and wherein the set of two or more rows reflects the set of aggregation methods supported by the switch engine.

25. **(New)** The apparatus of claim 24 further comprising a component to calculate an aggregation mask, wherein the calculating includes performing a Boolean AND operation on the table entries of the two or more selected rows from the aggregation table.

26. **(New)** The apparatus of claim 25 further comprising a component to calculate an output mask, wherein the calculating includes performing a Boolean AND operation on the aggregation mask and a forwarding mask.

27. **(New)** The apparatus of claim 26 further comprising a component to forward the frame to at least one physical link according to the output mask.

28. **(New)** The apparatus of claim 22 wherein the aggregation table includes at least two sets of rows and at least two sets of columns, each set of rows corresponds to a set of aggregation codes derived exclusively from one of at least two aggregation methods, such that each aggregation method is associated

with only one set of rows, each set of columns corresponds to a link aggregation group (LAG), each LAG includes a plurality of physical links, each physical link corresponds to one column, and each LAG uses only one aggregation method.

29. **(New)** A computing system comprising a machine, the computing system also comprising instructions disposed on a computer readable medium, the instructions capable of being executed by the machine to perform a method, the method comprising:

programming an aggregation table defining a plurality of entries, each entry associated with a column and a row, wherein programming the aggregation table includes setting an entry to true if:

the column of the entry corresponds to a physical link of a link aggregation group (LAG) that uses an aggregation method associated with the row of the entry and which is the physical link to be selected within its LAG according to the aggregation method, or

the column of the entry corresponds to a physical link associated with a LAG that does not use the aggregation method associated with the row of the entry; and

else setting the entry to false.

30. **(New)** The method of claim 29 further comprising receiving a frame at a switch engine that supports a set of aggregation methods; and calculating a set of aggregation codes for the frame.
31. **(New)** The method of claim 30 further comprising selecting a set of two or more rows of the aggregation table, each row being selected according to a corresponding aggregation method, and wherein the set of two or more rows reflects the set of aggregation methods supported by the switch engine.
32. **(New)** The method of claim 31 further comprising calculating an aggregation mask by performing a Boolean AND operation on the table entries of the two or more selected rows.
33. **(New)** The method of claim 32 further comprising calculating an output mask by performing a Boolean AND operation on the aggregation mask and a forwarding mask.
34. **(New)** The method of claim 33 further comprising forwarding the frame to at least one physical link according to the output mask.
35. **(New)** The method of claim 29 wherein the aggregation table includes at least two sets of rows and at least two sets of columns, each set of rows corresponds to a set of aggregation codes derived exclusively from one of at

least two aggregation methods, such that each aggregation method is associated with only one set of rows, each set of columns corresponds to a link aggregation group (LAG), each LAG includes a plurality of physical links, each physical link corresponds to one column, and each LAG uses only one aggregation method.